18. [(New)] A method of measuring the luminescence emitted in the measuring medium of a luminescent assay, said method being capable of correcting the variations of luminescence due to the optical properties of the measuring medium, said method comprising:

(a) providing an exciting light source for irradiating a luminescent assay wherein said assay, upon excitation, emits luminescence at two different wavelengths, $\lambda_1$ and $\lambda_2$;

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(b) irradiating said assay with said exciting light source, wherein said light source is spaced apart from said assay to form a gap therebetween;

(c) splitting the luminescence emitted by the assay at wavelengths $\lambda_1$ and $\lambda_2$ following excitation, wherein the luminescence at $\lambda_1$ is emitted by a reference compound and reflects the optical properties of the measuring medium, and the luminescence at $\lambda_2$ is emitted by a tracer compound and is proportional to the amount of analyte;

(d) collecting the luminescence emitted at wavelengths $\lambda_1$ and $\lambda_2$; and

(e) measuring the luminescence emitted at wavelength $\lambda_2$ and correcting said emission on the basis of the luminescence emitted at wavelength $\lambda_1$.

19. [(New)] The method of claim 18 further comprising a built-in method of correcting the measurement of the luminescent emission made at wavelength $\lambda_2$, consisting of fixing a counting rate on a channel measuring the luminescent emission of the reference compound at wavelength $\lambda_1$, and then, when this counting rate is reached, triggering the end of the measurement on a channel measuring the luminescent emission at wavelength $\lambda_2$.

20. (New) The method of claim 18 wherein the luminescence emitted at $\lambda_2$ results from an energy transfer.

21. (New) The method of claim 18 wherein the luminescence emitted by the reference compound and by the tracer compound, at wavelengths $\lambda_1$ and $\lambda_2$ respectively, are measured simultaneously.

22. (New) The method of claim 18 wherein the correction of luminescence is calculated, said calculation comprising dividing the luminescence at $\lambda_2$ by the luminescence at $\lambda_1$ to obtain the corrected luminescence.

23. (New) The method of claim 18 wherein the tracer compound and the reference compound are the same compound.

24. (New) The method of claim 18 wherein the tracer compound and the reference compound are different compounds.

25. (New) The method of claim 18 wherein the tracer compound and/or the reference compound are fluorescent compounds.

26. [(New)] The method of claim 18 wherein the tracer compound and/or the reference compound are rare earth chelates or cryptates.

27. [(New)] The method of claim 18 wherein the measurement of the luminescent emission at wavelength $\lambda_2$ is made by a time-resolved method.

28. [(New)] The method of claim 18 wherein the emission lifetime of the tracer compound and/or of the reference compound are more than one microsecond.

29. [(New)] The method of claim 18 wherein the corrected luminescence is measured with a picomol/liter measuring sensitivity.

30. [(New)] The method of claim 18 further comprising focusing an exciting beam from said light source to said assay with a lens.

31. [(New)] The method of claim 18 further comprising filters and lenses for directing the exciting light beam on the assay.

32. [(New)] The method of claim 18 further comprising one or more filters for splitting the luminescence emitted by the assay at wavelengths $\lambda_1$ and $\lambda_2$ following excitation.